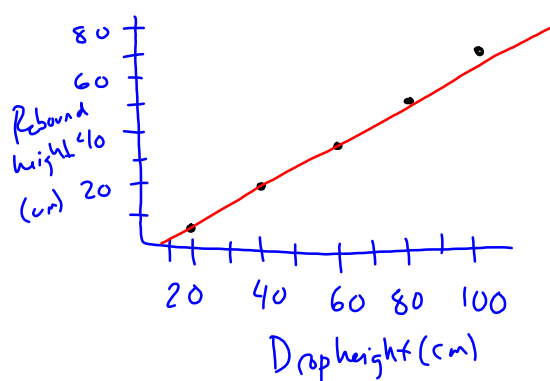


Drop	Soccer	Volley	Tennis	Golf	Wiffle	Lacrosse	Kick	Racquet
20 cm	8	10	11	15	12	11	8	12
40 cm	23	20	20	29	19	27	19	26
60 cm	38	40	34	50	27	41	39	41
80 cm	48	60	46	65	35	57	62	50
100 cm	70	80	59	83	53	71	73	64

Graphing:

Soccer Ball
 slope point 1 ordered pairs
 $(20, 8)$ $(40, 23)$ $(60, 38)$ $(80, 48)$
 $(100, 70)$ slope point 2



$$\begin{aligned}
 \text{slope} &= \frac{\text{rise}}{\text{run}} \\
 &= \frac{\text{rebound height}}{\text{drop height}} \\
 &= \frac{70 \text{ cm} - 8 \text{ cm}}{100 \text{ cm} - 20 \text{ cm}} \\
 &= \frac{62 \text{ cm}}{80 \text{ cm}} \\
 &= 0.775
 \end{aligned}$$

THIS IS EFFICIENCY!

* how well the ball bounces.

Efficiency for each type:

Soccer = 0.775 4

Volley = 0.875 1

Tennis = 0.600 7

Golf = 0.850 2

Wiffle = 0.513 8

Lacrosse = 0.750 5

Kick = 0.813 3

Racquet = 0.650 6

Probably
backwards
due to data
collection